July 1, 2003 and the Notice of Draftsperson's Patent Drawing Review included in the Office Action of April 8, 2003.[2] Thus, Applicant believes the objection to the drawings indicated in the present Non-Final Office Action to be in error. Accordingly, the Examiner is kindly requested to indicate acceptance of the drawings filed March 29, 2001 in the next action.

To summarize the Office Action, claims 2-8, 10, 13-21, 26-27, 29-30 and 62-67 are indicated by the Examiner as being rejected on obviousness-type double patenting grounds, claims 2-8, 10, 13-21, 26-27, 29 and 62 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Corrsin (U.S. Patent No. 3,477,194), claims 2-8, 10, 13-21, 27, 29, 62 and 67 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Muellich (U.S. Patent No. 5,893,959), claims 63-67 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Corrsin in view of Osborne (U.S. Patent No. 4,069,080), and claims 26, 30, and 63-66 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Muellich in view of Osborne. The outstanding grounds of rejection are addressed below.

Obviousness-type Double Patenting Rejection

The Office Action indicates that claims 2-8, 10, 13-21, 26-27, 29-30 and 62-67 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting

[2] The Notice of Allowance of July 1, 2003 was withdrawn in response to Applicant's Petition to Withdraw from Issue, which was submitted with the Request for Continued Examination on October 14, 2003.

as being unpatentable over claims 1-9 and 11-29 of U.S. Patent Application No. 10/666,264. Applicant believes this rejection to be in error.

In this regard, Applicant notes that the Examiner previously introduced this ground of rejection in the Final Office Action of March 25, 2005. However, Applicant filed a Terminal Disclaimer with respect to U.S. Patent Application No. 10/666,264 in the present application on May 6, 2005. Thus, the double patenting rejection is believed to have been obviated by virtue of the previously filed Terminal Disclaimer. Accordingly, withdrawal of this ground of rejection is requested.

Claims Rejections - 35 U.S.C. § 102(b)

As noted above, claims 2-8, 10, 13-21, 26-27, 29 and 62 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Corrsin. This ground of rejection is traversed.

Independent claim 10 defines a method of forming a weld between plastic workpieces over a joint region comprising, *inter alia*, exposing the joint region to incident radiation having a wavelength outside the visible range so as to cause melting of the surface of one or both workpieces at the joint region, allowing the melted material to cool thereby welding the workpieces together, and providing a radiation absorbing material at the joint region in one of the workpieces which has an absorption band in the range of 780 nm - 1500 nm matched to the wavelength of the incident radiation so as to absorb the incident radiation and generate heat for the melting process, wherein the radiation absorbing material is visually transmissive so that the material does not substantially affect the appearance of the joint or the workpieces in visible

light. Notwithstanding the Examiner's rejection, Applicant submits that Corrsin fails to teach or suggest all the limitations of claim 10.

For instance, Corrsin teaches the use of carbon to provide an infrared absorber in a welding process. *See*, Corrsin at col. 1, line 40; col. 2, line 35. However, as carbon is opaque to visual wavelengths, the use of carbon as a infrared absorber fails to suggest a radiation absorbing material "which is visually transmissive so that the material does not substantially affect the appearance of the joint or the workpieces in visible light", as required by claim 10.

Moreover, the absorbers taught by Corrsin other than the opaque carbon containing inks likewise cannot correspond to the claimed "radiation absorbing material" in the method defined by claim 10. Rather, Corrsin teaches that absorbers "other than carbon containing inks" are used in conjunction with a carbon dioxide laser, which produces radiation at a wavelength of 10.6 microns. *See*, Corrsin at col. 3, line 71- col. 4, line 6. However, the wavelength of 10.6 microns, or 10,600 nm, is clearly outside the recited wavelength range of 780 nm - 1500 nm of the absorbing material employed in the method of claim 10.

Therefore, Corrsin does not reasonably suggest a method of forming a weld between plastic workpieces over a joint region in which the radiation absorbing material is <u>both</u> visually transmissive and absorbs in the range of 780 nm - 1500 nm. Indeed, the only materials described in Corssin that are visually transparent require the use of incident wavelengths that are far outside the range of wavelengths defined in claim 10. Further, the other absorbers taught by Corrsin, such as the carbon containing inks, are clearly not visually transmissive.

As evidenced by the foregoing, Corrsin fails to teach or suggest all the features of the method defined by claim 10. Therefore, reconsideration and withdrawal of the rejection of claim 10 as allegedly being anticipated by Corrsin is requested.

Next, Applicant addresses the rejection of claims 2-8, 10, 13-21, 27, 29, 62 and 67 under 35 U.S.C. § 102(b) as allegedly being anticipated by Muellich. This rejection is likewise traversed because Muellich fails to teach or suggest all the limitations of claim 10.

Applicant respectfully disagrees with the Examiner's paraphrasing of the disclosure of the Muellich reference. As demonstrated below, the teaching of Muellich does not suggest all the recited features of the method defined by claim 10. For instance, Muellich teaches the use of laser welding to join workpieces together to produce a resultant structure that provides a "homogenous visual impression, in particular with regard to color." *See*, Muellich at col. 2, lines 18-21. However, the laser welding taught by Muellich involves providing suitable additives to both "workpiece parts" to be welded such that: a) with respect to infrared radiation, one of the workpieces is substantially transparent while the other is substantially absorbent, as described at col. 2, line 64 - col. 3, line 3, and b) with respect to the visible wavelength range, the additives are impermeable to light rays so that the resulting structure provides a substantially homogeneous visual impression by virtue of the workpieces being opaque to visible light, as described at col. 3, lines 3-7 and col. 9, lines 19-21.

However, the laser welding of workpiece parts taught by Muellich clearly differs from the method defined by claim 10. As noted above, claim 10 requires that the radiation absorbing material is visually transmissive so that the material does not substantially affect the appearance

of the joint or the workpieces in visible light. By contrast, the additives described by Muellich are impermeable to light rays. *See*, Muellich at col. 3, lines 3-7. Indeed, Muellich teaches that a high absorption is achieved by the use of black dye pigments as a radiation absorbing material. See, e.g., Muellich at col. 7, lines 42-44. The black dye pigments as radiation absorbing material in a laser welding process are clearly opaque. Thus, the radiation absorbing material in the laser welding process of Muellich does not suggest a radiation material that is visually transmissive, as defined by claim 10.

Therefore, Muellich fails to suggest all the claimed features of the method of forming a weld recited by claim 10. Accordingly, reconsideration and withdrawal of the rejection of claim 10 as allegedly being anticipated by Muellich is requested.

Turning to the dependent claims, Applicant submits that claims 2-8, 13-21, 26-27, 29-30 and 62-67 are allowable at least by virtue of depending from claim 10, which is believed to be allowable at least for the reasons discussed above. Therefore, allowance of claims 2-8, 10, 13-21, 26-27, 29-30 and 62-67 is requested.

Claim Rejections - 35 U.S.C. § 103(a)

As noted above, claims 63-67 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Corrsin in view of Osborne. Without commenting substantively on the grounds of rejection, Applicant submits that claims 63-67 are allowable at least by virtue of depending from claim 10.

Turning to the rejection of claims 26, 30 and 63-66 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Muellich in view of Osborne, Applicant likewise submits that these claims are allowable at least by virtue of depending from claim 10.

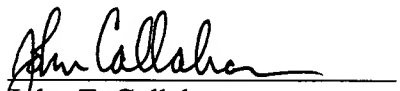
Further, Applicant notes that Osborne, which the Examiner relies upon to teach the features of claims 26, 30 and 63-66 that are admittedly deficient in Muellich, teaches the use of a carbon dioxide laser to weld plastic materials. *See* Osborne at col. 2, line 60 - col. 3, line 2. However, as the wavelength of a carbon dioxide laser is known to be 10,600 nm, the teaching of Osborne, even assuming the asserted motivation to combine is proper, would fail to suggest the recited wavelength range of 780 nm - 1500 nm. Rather, the combination of Muellich and Osborne would teach one skilled in the art to use a carbon dioxide laser with a wavelength range of 10,600 nm to weld plastic materials. Thus, the resultant method achieved by the combination of Muellich in view of Osborne would fail to suggest all the limitations of claims 63-67.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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